# **Experimental California Fire Weather Web Page and Emergency Communications Center Dispatch Area (ECCDA) Forecast Summaries**

# **Product Description Document (PDD)**

#### Part I - Mission Connection

a. <u>Product Description</u> - For the past several year, land management and fire suppression agencies serving California have expressed a need for more generalized fire weather forecasts suitable for agency radio broadcasts from Emergency Communication Center Dispatch Area (ECCDA) offices. These twice-daily fire agency radio broadcasts are critical to relaying life saving information to fire fighting crews in the field. The ECCDA Forecast Summary is a methodology developed to fulfill this need.

Experimental ECCDA Forecast Summaries combine portions of several WFO Fire Weather Planning Forecasts (FWF) into a single product that contains fewer weather parameters. The summaries are not new products, but rather are a repackaging of current FWF information. In 2005, WFO Reno developed a methodology to merge needed components of existing Fire Weather Planning Forecasts (FWF) that was successfully tested with local customers. The scripts to support this methodology statewide in California have been developed for the 2006 fire season. Production of ECCDA Forecast Summaries is nearly automatic. When FWFs from more than one WFO are used to produce an ECCDA forecast, an NWS forecaster simply ensures that the ECCDA forecast discussion accurately reflects the weather across that ECCDA. Minor editing to merge the FWF discussions involved may occasionally be needed. Dissemination of experimental ECCDA Forecast Summaries from Weather Forecast Offices (WFO) in California to the ECCDA offices will be via the Internet, accessible from the web page described below. A spreadsheet illustrating the ECCDA forecast areas in California and the FWFs needed to produce the ECCDA Forecast Summaries has been coordinated with Predictive Services staff in California and has been provided to the Western Region WFOs responsible for the ECCDA Forecast Summaries. This spreadsheet is available upon request from Western Region MSD.

Land management and fire suppression agencies serving California have also requested a single web page that allows access to interagency fire weather information for California. A test page has been developed and is accessible at <a href="http://www.wrh.noaa.gov/sto/cafw/">http://www.wrh.noaa.gov/sto/cafw/</a>. Most of the page provides quick links to other existing interagency web sites and internet information. This page incorporates the current format of the main NWS public weather internet portal. In addition to ECCDA Forecast Summaries, this page is also testing a spot forecast request router that, based on customer entered latitude and longitude, automatically directs the request to the correct WFO spot forecast request page.

Both the experimental ECCDA Forecast Summaries and the supporting California Fire Weather web page are being tested to allow easier access to NWS information by land management and fire agencies serving California. Faster and easier access to critical

- statewide fire weather information will help these agencies in their missions to protect life and property, including fire fighting crews, from the ravages of wildland fires.
- b. <u>Purpose</u> Based on customer requests over the past several years, test a standardized web page that allows quick and easy access to interagency fire weather information for all of California. Similarly, test a methodology to provide simplified, consolidated FWF information in a format more suitable for fire agency radio broadcast to field crews.
- c. <u>Audience</u> All land management and fire agencies in California, from the local to the state and federal level. Customers include Geographic Area Coordination Center(GACC) Predictive Service offices in Redding and Riverside California.
- d. <u>Presentation Format</u> Experimental ECCDA Forecast Summaries will be available to customers from the California Fire Weather web page:
   <u>http://www.wrh.noaa.gov/sto/cafw/</u>. No other routine dissemination of the experimental ECCDA Forecast Summaries is made. The appearance of the experimental ECCDA Forecast Summaries is a simplified version of the FWF.
- e. Feedback Method Both the web page and experimental ECCDA Forecast Summaries will be tested with customers from June 1 to November 1, 2006. The California Fire Weather web page (<a href="http://www.wrh.noaa.gov/sto/cafw">http://www.wrh.noaa.gov/sto/cafw</a>) contains a prominent customer feedback and comment request section at the top of the welcome page. All customer and WFO comments and suggestions will be consolidated and implemented monthly by the Western Region Fire Weather Program manager with assistance from the project working group. It is anticipated that several changes will be made to both the experimental ECCDA Forecast Summaries and web page based on customer and WFO feedback during the test period.
- f. <u>Example</u> The experimental ECCDA Forecast Summary is a simplified version of the standard Western Region FWF. Note that per current fire agency requirements, the experimental ECCDA Forecast Summary will be issued to support routine radio broadcasts and will not be routinely updated. Customers are clearly advised to always consult the latest FWF and RFW products for updated information.

ZCZC SFOECC005 ALL TTAA00 KSFO 071510

STOECC005

FIRE WEATHER FORECAST FOR REDDING ECC DISPATCH NATIONAL WEATHER SERVICE - SACRAMENTO CA 810 AM PDT WED JUN 7 2006

Click on the link(s) below to go directly to forecast segments:

WESTERN SHASTA TRINITY NF INCLUDING TRINITY ALPS AND TRINITY

DAM-CLAIR ENGLE LAKE

# CENTRAL SHASTA TRINITY NF-LAKE SHASTA AREA AND THE NORTH VALLEY FOOTHILLS

# NE SHASTA TRINITY NF INCLUDING MT SHASTA-MCCLOUD BASIN AND BURNEY BASIN

#### .DISPATCH AREA DISCUSSION...

UPPER LEVEL TROUGH IN THE EASTERN PACIFIC WILL MOVE OVER THE DISTRICT TODAY AND LINGER THROUGH THE FORECAST PERIOD. THIS WILL RESULT IN SLIGHTLY COOLER TEMPERATURES WITH SLIGHTLY HIGHER DAYTIME HUMIDITIES AND OVERNIGHT RECOVERIES. THERE IS A SLIGHT CHANCE OF AN ISOLATED SHOWER OR THUNDERSTORM OVER WESTERN MOUNTAINS THIS AFTERNOON INTO EVENING...OTHERWISE DRY WEATHER IS EXPECTED THROUGH MOST OF THE WEEKEND. ON SUNDAY ANOTHER TROUGH WILL APPROACH THE DISTRICT AND PRODUCE A CHANCE OF SHOWERS THROUGH THE FIRST PART OF NEXT WEEK.

### THE FORECAST FOR:

WESTERN SHASTA TRINITY NF INCLUDING TRINITY ALPS AND TRINITY DAM-CLAIR ENGLE LAKE

810 AM PDT WED JUN 7 2006

| TODAY   |
|---|
| SKY/WEATHERMOSTLY SUNNY UNTIL 12 PMTHEN PARTLY CLOUDY |
| SLIGHT CHANCE OF THUNDERSTORMS AFTER 2 PM.            |
| MAX TEMPERATURE75-85 VALLEYS 65-75 HIGHER TERRAIN.    |
| MIN HUMIDITY25-35 PERCENT.                            |
| 20-FOOT WINDS   |
| VALLEYS/LWR SLOPESNORTHWEST WINDS 3 TO 6 MPH.         |
| RIDGES/UPR SLOPESNORTHWEST WINDS 3 TO 6 MPH.          |
| LAL2.   |
| TONIGHT   |
| SKY/WEATHERPARTLY CLOUDY UNTIL 12 AMTHEN MOSTLY CLEAR |
| SLIGHT CHANCE OF SHOWERS AND THUNDERSTORMS            |
| MIN TEMPERATURE55-65.                                 |
| MAX HUMIDITY85-95 PERCENT VALLEYS70-80 PERCENT HIGHER |
| TERRAIN.  |
| 20-FOOT WINDS   |
| VALLEYS/LWR SLOPESNORTHWEST WINDS 3 TO 6 MPH.         |

RIDGES/UPR SLOPES....WEST WINDS 3 TO 6 MPH SHIFTING TO THE

NORTH LATE IN THE EVENING.

# .THURSDAY...

LAL.....2.

SKY/WEATHER.....PARTLY CLOUDY.

MAX TEMPERATURE.....75-85.

MIN HUMIDITY......15-25 PERCENT.

20-FOOT WINDS......

VALLEYS/LWR SLOPES...NORTHWEST WINDS 3 TO 6 MPH.

RIDGES/UPR SLOPES....NORTH WINDS 3 TO 6 MPH.

LAL.....1.

### .EXTENDED...

.FRIDAY...PARTLY CLOUDY. LOWS IN THE 50S TO MID 60S. HIGHS IN THE 70S TO LOWER 80S. NORTH WINDS UP TO 5 MPH.

.SATURDAY...MOSTLY CLEAR. LOWS IN THE 50S TO LOWER 60S. HIGHS IN THE 70S TO LOWER 80S. NORTHWEST WINDS UP TO 3 MPH.

.SUNDAY...MOSTLY CLEAR. LOWS IN THE 50S TO LOWER 60S. HIGHS IN THE 70S TO LOWER 80S. WEST WINDS UP TO 3 MPH.

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THE FORECAST FOR:

CENTRAL SHASTA TRINITY NF-LAKE SHASTA AREA AND THE NORTH VALLEY FOOTHILLS

700 AM PDT WED JUN 7 2006

#### .TODAY...

SKY/WEATHER......PARTLY CLOUDY. SLIGHT CHANCE OF AN AFTERNOON SHOWER OR THUNDERSTORM.

MAX TEMPERATURE.....74-88.

MIN HUMIDITY......20-30 PERCENT LOWER ELEVATIONS...AND 25-40 PERCENT HIGHER ELEVATIONS.

20-FOOT WINDS......

VALLEYS/LWR SLOPES...NORTHWEST WIND UP TO 5 MPH INCREASING TO SOUTHWEST 10 TO 15 MPH IN THE AFTERNOON.

RIDGES/UPR SLOPES....NORTHWEST WIND 10 TO 15 MPH BECOMING SOUTHWEST 10 TO 20 MPH. LOCAL GUSTS TO AROUND 30 MPH.

LAL......1 POSSIBLY INCREASING TO 2 IN THE AFTERNOON. CWR (>= 0.10 IN)....0 PERCENT.

### .TONIGHT...

SKY/WEATHER.....MOSTLY CLEAR.

MIN TEMPERATURE.....39-49 HIGHER ELEVATIONS...52-62 LOWER ELEVATIONS.

MAX HUMIDITY......67-87 PERCENT.

20-FOOT WINDS......

VALLEYS/LWR SLOPES...WEST WIND 5 TO 10 MPH.

RIDGES/UPR SLOPES....SOUTHWEST WIND 10 TO 15 MPH. LOCAL GUSTS UP TO 30 MPH IN THE EVENING.

| LAL  |
|--|
| .THURSDAY  SKY/WEATHERMOSTLY SUNNY.  MAX TEMPERATURE70-85.  MIN HUMIDITY20-35 PERCENT.  20-FOOT WINDS  VALLEYS/LWR SLOPESWEST WIND UP TO 5 MPH INCREASING TO  SOUTHWEST 10 TO 15 MPH IN THE AFTERNOON. |
| RIDGES/UPR SLOPESSOUTHWEST WIND UP TO 5 MPH INCREASING TO 10 TO 15 MPH IN THE AFTERNOON.  LAL  |
| <b>.EXTENDED</b> FRIDAY THROUGH SUNDAYMOSTLY CLEAR. LOWS IN THE 40S TO 50S. HIGHS IN THE 70S TO 80S. SOUTH WIND 5 TO 15 MPH.   |
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| THE FORECAST FOR: NE SHASTA TRINITY NF INCLUDING MT SHASTA-MCCLOUD BASIN AND BURNEY BASIN 810 AM PDT WED JUN 7 2006  |
| .TODAY SKY/WEATHERPARTLY CLOUDY. SLIGHT CHANCE OF THUNDERSTORMS. MAX TEMPERATURE80-85 VALLEYS AND 70-80 RIDGES. MIN HUMIDITY25-40 PERCENT. 20-FOOT WINDS   |
| VALLEYS/LWR SLOPESVARIABLE 3 TO 7 MPH BECOMING SOUTHWEST UP TO 10 MPH IN THE AFTERNOON. RIDGES/UPR SLOPESSOUTHWEST WINDS 10 TO 15 MPH.   |
| HAINES INDEX3 VERY LOW. LAL2. CWR (>= 0.10 IN)0 PERCENT.   |

# .TONIGHT...

SKY/WEATHER......PARTLY CLOUDY. SLIGHT CHANCE OF THUNDERSTORMS THROUGH THE NIGHT.

MIN TEMPERATURE.....40-50.

MAX HUMIDITY......80-100 PERCENT VALLEYS AND 80-100 PERCENT RIDGES.

20-FOOT WINDS......

VALLEYS/LWR SLOPES...WEST WINDS UP TO 10 MPH.

RIDGES/UPR SLOPES....WEST WINDS 10 TO 15 MPH. HAINES INDEX......3 VERY LOW. LAL......2.
CWR (>= 0.10 IN)....0 PERCENT.

### .THURSDAY...

SKY/WEATHER.....PARTLY CLOUDY. MAX TEMPERATURE....70-80.

MIN HUMIDITY......20-45 PERCENT.

20-FOOT WINDS......

VALLEYS/LWR SLOPES...VARIABLE 3 TO 6 MPH BECOMING WEST UP TO 10 MPH IN THE AFTERNOON.

RIDGES/UPR SLOPES....VARIABLE 3 TO 7 MPH BECOMING SOUTHWEST UP TO 10 MPH IN THE AFTERNOON.

### .EXTENDED...

.FRIDAY...PARTLY CLOUDY. LOWS IN THE LOWER TO MID 40S. HIGHS IN THE 70S TO MID 80S. NORTHWEST WINDS UP TO 10 MPH.

.SATURDAY...MOSTLY CLEAR. LOWS IN THE LOWER TO MID 40S. HIGHS IN THE 70S TO MID 80S. NORTHWEST WINDS UP TO 10 MPH.

.SUNDAY...MOSTLY CLEAR. SLIGHT CHANCE OF SHOWERS. LOWS IN THE LOWER TO MID 40S. HIGHS IN THE 70S TO MID 80S. WINDS GENERALLY LESS THAN 6 MPH.

.SUNDAY NIGHT THROUGH TUESDAY...MOSTLY CLEAR. SLIGHT CHANCE OF SHOWERS. LOWS IN THE LOWER TO MID 40S. HIGHS IN THE 70S TO MID 80S.

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### Part II - Technical Description

a. <u>Format and Science Basis</u> - Experimental ECCDA Forecast Summaries are made up of one or more NWS Fire Weather Forecasts (FWF) which are compiled into a single text file. The format is similar to the FWF, including headlines highlighting Fire Weather Watches / Red Flag Warnings, a discussion, and forecasts for specific weather elements.

These forecasts are created at a WFO using AWIPS scripts that parse the necessary FWF components into locally stored work products. After a review and minor modifications as needed are done, the forecaster edits the work product into a product header that automatically sends the forecast summary to the Western Region web server for display.

The process uses 3 scripts, one to create the initial work products, one to send these products to the local Rsync server and another that will send them from the local Rsync server to the

Western Region Rsync server. The Rsync processes were chosen as the most secure means of getting products from the local office to WRH.

The general experimental ECCDA production process is defined below:

AWIPS text triggers are configured for each of the FWF's that an office needs to create their ECCDA Forecast Summary(ies). Each time a needed FWF is received and stored locally, the trigger will create work products and store them in the text database.

Workstation text alarms are configured for one or more workstations which will alert the forecaster that new work products are available.

Once all the necessary FWF products are available, the forecaster edits the individual draft ECCDA Forecast Summary to review the one or more discussions into a single concise discussion relevant to the ECCDA area. No editing of the actual forecast elements is done. When complete, the work product is saved to a different product header (PIL) that is used to send the products to the local Rsync server.

The local Rsync server will be configured to monitor a directory for the saved ECCDA products and automatically send them to the Web server.

- b. <u>Availability</u> The California Fire Weather web page will be available consistently as a standard NWS web site. ECCDA Forecast Summaries will be produced twice per day during the high fire season in California, at 9:45 a.m. and at 4:00 p.m., and once each business day during the winter low season. The dates to switch between low and high fire season will be coordinated among WFOs that serve northern and southern California so that the format of the ECCDA Forecast Summaries remains consistent for those regions of the state.
- c. Additional Information Information regarding the availability of the California Fire Weather web page and ECCDA Forecast Summaries will be included in the 2006 California Fire Weather Annual Operating Plan (AOP).